

B-1-c. Cropland, Truck (Irrigated) Guidance Document

SOILS

Symbol Map Unit

KnC Keahua silty clay loam, 7 to 15 percent slope

These are very deep well-drained soils on moderately steep uplands. The surface layer is dark reddish-brown silty clay loam. Runoff is slow to medium and the erosion hazard is slight to moderate. Permeability is moderate. When soil is tilled, the plowpans can become cloddy and form and restrict root growth. A combination of several conservation practices is needed on cultivated fields to control erosion and provide for proper runoff management. The calcium and magnesium status is good but potassium reserves are low. "P" fixation is medium to high in new fields. Overall available water capacity is low for the 60" profile, moisture status should be closely monitored and irrigation water should be applied frequently and in small amounts.

REPRESENTATIVE RESOURCE CONCERNS

- poor soil tilth
- plow pan
- sheet and rill erosion
- ephemeral gully erosion
- plant productivity
- inadequate outlets
- soil moisture management for irrigated cropland
- pesticide & nutrient surface water contaminants
- pesticide & nutrient ground water contaminants

EFFECTS: (+) = Beneficial effect (0) = No effect (-) = Negative effect

Resource:	SOIL				WATER						AIR		PLANTS		ANIMALS
Considerations:	Erosion		Condition		Quantity		Quality				Quality	Condition	Suitability	Condition	Management
Concern Practice	Sheet & Rill	Ephemeral Gully	Soil Tilth	Compaction	Inadequate Outlets	Water Mgt.	Ground Water Contaminants		Surface Water Contaminants		Airborne Sediment & Smoke Particles – Onsite & Offsite	Air Movement	Plants Unsuitable for Intended Use	Productivity (kind and distribution)	Population & Resource Balance
							Pesticide	Nutrient	Pesticide	Nutrient					
Access Road	0	+	0	+	+ or -	+	+	+	+	+ & -	0	0	0	0	+
Conservation Crop Rotation	+	+	+	+	0	0	0	0	0	0	0	0	0	+	+
Contour Farming	+	+	+	0	+	0	-	-	+	+	+	0	0	+	0
Cover Crop	+	+	+	+	+	0	+	+	+	+	+	+	+	+	+
Deep Tillage	+	+	+	+	+	+	-	-	+	+	+	0	0	+	0
Diversion	+	+	-	0	-	+	-	-	+	+	0	0	0	+	+
Grassed Waterway	0	+	0	0	+	0	-	-	+	+	0	0	+	+ & -	+
Irrigation System	+	+	-	+	+	-	+ & -	+ & -	+	+	+	0	0	+	-
Irrigation Water Conveyance	0	0	0	0	0	+	0	0	+	0	0	0	0	+	-
Irrigation Water Mgt.	0	+	+	+	0	+	+	+	+	+	0	0	0	+	+
Nutrient Mgt.	0	0	0	0	0	0	0	+	0	+	0	0	0	+	+
Pest Mgt.	+	0	0	0	0	+	+	0	+	0	+	0	0	+	-
Terraces (gradient)	+	+	-	0	+	0	-	-	+	+	+	0	+	+	0

* If roads are placed in right locations, they can serve as water outlets (grassed waterway).